Driving innovation and rapid ROI in banking

The business benefits of service orientation: five case studies.

ON DEMAND BUSINESS™

The market pressures in financial services today demand that banks be both innovative and flexible—able to respond quickly to changing customer demands and competitive challenges. This brochure describes how service orientation enables such agility. Service orientation is an approach that can help provide flexibility and responsiveness by integrating processes and information, thus making employees more effective. It enables collaboration inside and outside an organization, promoting innovation and leveraging information for business insight—all helping to grow profitable revenue, while reducing costs and deepening relationships with customers.

Service orientation is not a technology or a trend—it's a *business strategy,* a new approach that can help to eliminate the barriers between business processes and the technologies that enable them. Specifically, service orientation takes everyday business processes and breaks them down into individual business functions, called *services*. These services can then be reused—shared with other departments within an organization, integrated and exposed to other channels, customers and suppliers to create new or modified business processes—leveraging the existing front-office and back-office banking applications already in place.

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Financial institutions are beginning to see the value of common business processes in helping to reduce cost and lost revenue attributable to redundant functions and duplicated efforts. Service orientation saves your business and technology assets, while avoiding the need to manage multiple competing and overlapping functions. Best of all, service orientation offers an approach that can be incrementally adopted as business needs change. It provides the information and visibility needed to shape the right decisions, and the flexibility to adapt to new opportunities and threats on the fly.

On the following pages are real stories about banks that have adopted service orientation and are attaining rapid return on investment (ROI), sustainable growth and a competitive advantage. These stories share the visions of innovative business and IT leaders who are working together to align IT with business goals. Most important, these stories demonstrate how banking organizations are using service orientation to *meet* their business goals while simultaneously laying the groundwork for more flexible IT systems that can continue to provide a return in the years ahead.

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Account opening—through service orientation, a large U.S. retail bank significantly reduces costs and realizes an ROI in less than 12 months.

Common account opening capabilities: realizing value by sharing information across business lines

One of the largest retail banking organizations in the United States gains a single and common approach to account opening capabilities across different channels, thereby eliminating process redundancy and improving lead management. Furthermore, by reducing the costs and the time spent managing duplicate systems, this company estimates it will realize a return on investment within one year for this project alone.

To grow across the business lines, focus on the business as a whole

As have many well-known banking organizations, this leading consumer bank experienced tremendous growth through a successful merger and acquisition strategy. With its acquisitions, the bank obtained a substantial new customer base, along with a patchwork of customer information and applications. The organization wanted to leverage the new customer base it had acquired, and also wanted to focus on growing organically across business lines by cross-selling and up-selling its products and services. Its aggressive three-year objectives included aligning business and IT strategies, bringing products to market faster and dramatically increasing revenue, while reducing costs by 25 percent.

Meeting these goals required more than "business as usual." The bank's executives applied an innovative execution strategy: approach both the lines of business and customer information from an enterprise perspective. By understanding from an enterprise perspective how to maximize information use and by recognizing process similarities across the business lines, the bank could enable the business lines to share services and valuable customer data for similar initiatives. This sharing would help the bank realize its time to market and cost reduction goals by decreasing development and deployment times of the services.

The CIO and the IBM team began the effort by talking to the different lines of business, such as mortgage, cards and deposits, as well as to the channels, including the stores (branches), call centers and e-channels, to understand their mission-critical business processes, their individual goals and their strongest pain points. They identified four critical processes that could be shared across multiple business lines as services: account opening, preapproved offers, claims and authentication. The bank utilized IBM software to capture and consolidate information from the bank's many sources, as well

as to define, test and modify new processes and services. In addition, the bank used the IBM Information Framework, a set of existing business models and best practices that reflects more than 15 years of IBM experience with financial institutions. The bank customized these models for its own business, while ensuring its strict quality requirements were met.

Account opening was selected as the first initiative for deployment, with other projects to follow. It was a costly process, running in multiple ways across various products and channels. It was also a key area of focus to increase the bank's opportunity for organic growth. The account opening project established a common approach that can be utilized across lines of business, enabling business leaders to leverage the associated customer information for lead generation, cross-selling and up-selling, and servicing. The service oriented approach enabled the business lines to share the account opening services, thereby minimizing development costs for multiple systems, speeding deployment of these key functions. It also reduces overall maintenance costs by having fewer systems that duplicate business processes.

Service orientation pays off

As part of the prioritization effort, the bank analyzed its application portfolio, including the 38 systems and hundreds of applications that support integration of business functions across the enterprise. The bank assessed applications for value, scalability and duplication. Through a service oriented approach, it was able to combine some of those systems, leading to reduction in operational, networking and management costs to achieve a return on investment in less than 12 months. The bank is also realizing further benefits—an upcoming technology investment will deliver an anticipated nine-to-one cost savings over previous technology implementation methods.

This bank turned to IBM for its innovative thinking and its ability to provide an end-to-end view from strategy to prioritized business requirements and information needs, to executable technical solutions. The bank recognizes the value of the service orientation approach, which is helping it to achieve business agility, align IT with its business needs and meet its aggressive growth and cost reduction goals.

Introducing new products—Australia's fifth largest bank saved AUS$20 million adopting service orientation and reusing key business functions.

A pragmatic and profitable approach to building a flexible bank and introducing new products

Australia's fifth largest bank attained an estimated AUS$20 million in savings by establishing a way to reuse 47 percent of its key business functions. By using a large percentage of some 200 services as many as 12 times across different channels, the bank also significantly improved time to market and reduced complexity. In addition, the bank realized a return on investment in less than a year for its new personal lending customer application system. Finally, by minimizing service disruptions to its channels, the bank is able to provide better customer service and drive higher customer satisfaction rates.

The challenge: support growth without disrupting customer service

Growth through merger and acquisition strategies can help banks gain a larger share of the marketplace. But it can also lead to challenges associated with greater process and technology complexity, which, in turn, can threaten customer service and satisfaction. During the middle and late 1990s, the bank faced this situation, when it was formed out of a five-bank merger. The resulting larger firm had offerings that spanned all aspects of the global financial industry, including retail and institutional banking.

Initially, the bank focused on integrating the various organizations and banking systems, even though it recognized that many of the systems were built on older architectures. In the meantime, customer satisfaction rates suffered as a result of service disruptions. As the bank developed its strategy for the 21st century, it changed its goals to focus on the business rather than technology and to reestablish high customer satisfaction rates and facilitate future growth. The bank executives knew they needed a better approach to support future growth and to be able to implement new functions and financial services while leveraging their existing core banking systems.

Improving time to market with service orientation

The new approach was highly pragmatic: create a middle layer between the bank channels and the core banking systems to minimize disruption to the channels as the bank implemented

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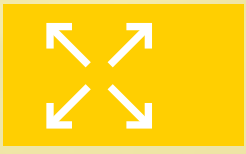
business changes. First, the bank analyzed the critical functions of the core banking systems and identified services that could be shared or leveraged across its channels. Based on its findings, the bank developed a middle layer of 200 reusable services such as customer look-up, customer profiles and account opening, a particularly expensive function. The bank used IBM WebSphere® software to build these services, because of IBM's strong commitment to open standards, helping position the bank to support current and future needs to manage multivendor environments. The business units across the bank leverage these services to achieve an integrated view of customers and to add new features and capabilities. Account opening services are now identical across the bank, including the branches, call centers, lending and the Internet channel.

This service orientation approach helps enable the bank to deploy new products with improved time to market, while reducing disruptions to operations. For example, the bank is able to deploy a new system that better meets current business needs, while the outdated system is still running and serving customers. Over time, products can be migrated to the new system, until the old system is completely replaced. Customers, meanwhile, will not experience a drop in service—and will reap the benefits of the new system's capabilities.

The bank's business leaders quickly understood that by building these functions as standards-based services, the channels could share and reuse the services as business needs changed. Going forward, the bank is building services for products, statements and document generation, enabling it to provide tailored product packaging to customers. For example, the bank can offer a loan, a credit card and a deposit account—this concept helps the bank to cross-sell and drive more revenue across its lines of business.

Realizing returns in less than a year

Today, the bank is well down the path to achieving a flexible business model that enables the bank to reduce complexity and cost, speed time to market for new products and respond more quickly to customer needs and changes in the marketplace. The bank has driven significant reuse of business services and has determined that building these common services, instead of individual solutions for each of its business units, has resulted in an estimated AUS$20 million in savings. Projects associated with its credit card, personal lending and teller applications have returned investments in less than one year. Most important, the bank again enjoys high customer satisfaction levels due to a consistent customer experience. This is another benefit the bank attributes to the shared use of services across its various channels.



A large Scandinavian bank uses service orientation to reduce personal loan origination process from four hours to 10 minutes.

Personal loans: gaining speed and efficiency to compete in an aggressive market

A large Scandinavian bank is working toward dramatically reducing its loan origination process from four hours to 10 minutes, improving its ability to effectively compete with Internet-based organizations. The service oriented solution is expected to be implemented in six months and to meet the bank's investment needs by offering 75 percent reusability in extending loan origination services to its international subsidiaries.

Multivendor systems and international borders hinder responsiveness

To achieve growth, a large Scandinavian financial services group had acquired a number of banks in the Nordic and Baltic Sea regions. This acquisition strategy presented certain operational challenges. The acquired banks operate under different laws and business processes, and they brought a mixture of computing systems and applications. The heterogeneous infrastructure hindered the bank's flexibility and competitive responsiveness, especially in the highly profitable personal loan market, where there was increasing pressure from Internet-based competitors.

The bank's branch representatives spent several hours and accessed up to six different banking applications to request and grant a personal loan. They had to log on, access different information files and enter the loan request into each system. In addition, there were numerous manual steps to perform credit checking. While the branch representatives provided a positive personal touch, the lengthy and complicated loan process threatened to damage the overall customer experience. Just as important, the four-hour process made it difficult to compete with institutions that used speedy online processes.

An enterprise-wide transformation project: save our assets

The board of directors launched a major transformation project aimed at attaining more business flexibility. The overall objectives are to reduce operational cost by tens of millions of euros; shift from a product- to a customer-centric focus in order to reinforce the bank's commitment to customer relationships; and execute future mergers with minimal disruption to its operations or loss of market share. Specific goals are to protect the bank's considerable IT investments, dramatically reduce the loan origination time and provide 60 to 80 percent reusability in the bank's international subsidiaries. This is a particular challenge, because the personal loan process varies as much as 50 percent in the bank's international subsidiaries, due to local laws and legacy systems.

In the past, the bank had tried to address its operational inefficiencies by replacing core systems, which proved costly and did not meet the bank's business requirements. For the transformation project, the bank believes a service oriented approach will be a better way to attain flexibility and reusability, while preserving IT assets.

The personal loan system has been selected as the pilot for the transformation project. A key requirement of the pilot is to demonstrate to the business leaders that the new system will meet their reusability, security, reliability and performance objectives. IBM has been selected as the preferred vendor, because of the reliability of its software solutions and its ability to create a production pilot. This enables the bank to put directly into production everything developed during the pilot, thereby saving considerable time and costs.

The bank's business leaders, working closely with the IBM team, began the transformation project by utilizing IBM's business modeling methodology to clearly define their business processes and requirements. The bank also leveraged the IBM Information Framework, a set of banking business processes that can be customized for a specific financial institution. Team members modeled the personal loan process and identified areas for improvement. They created reusable business services that enabled them to automate credit checking, develop one input screen for the loan application, eliminate the need to manually access multiple banking systems and avoid duplicate entry of information. These improvements help to increase employee productivity and decrease data entry errors.

Meeting business requirements in six months

Live production of the loan origination project for the first three European countries is planned to begin a mere six months after the pilot initiation. The service oriented framework developed by the bank and IBM is anticipated to make the bank's loan origination process more than 20 times faster—thereby helping the bank achieve the agility and responsiveness it needs to compete in the aggressive personal loan market. Moreover, 75 percent of the solution is expected to be reproducible in the other countries in which the bank operates—meeting the bank's 60 to 80 percent reusability requirements, while greatly reducing costs and preserving IT assets. By defining business processes as services, the bank will be better able to flexibly address the particular differences and needs of its international subsidiaries.

The new personal loan system will be in full production in more than 10 countries by July 2007. The bank will continue to realize a return on this initial investment as it leverages the benefits and efficiencies of the loan system in other business functions over the next five years.

A top-ten U.S. retail bank uses a service oriented approach to replace an outdated online banking system and meet aggressive performance requirements.

A new online banking system: reducing cost of future initiatives by creating common services

A top-ten United States retail bank creates a core set of services as part of its strategy to replace an outdated online banking system, and reuses those services in subsequent initiatives for the call centers, interactive voice response and commercial units. In addition to substantially decreasing development costs and deployment times, the single set of services enabled the bank to provide a common customer experience across its many channels.

Sharing services and information across business lines

The merger of two banks can often result in many redundant systems. This was the case when a top-ten U.S. retail bank merged with another large financial company. After the merger, the organization evaluated its online systems and elected to proceed with a new online banking system.

The online banking system replacement initiative was led by the bank's visionary CIO, who had relationships across four lines of business: online banking, call center, banking by phone or interactive voice response (IVR), and the branches In the past, banking delivery systems for these channels had been developed independently of one another, resulting in silos of information. This approach was inefficient, because the business functions and customer information were similar, yet banks developed and deployed separate but similar systems four times—thereby incurring very high development, maintenance and support costs.

For the new online banking system, the CIO, with the support of the business executives, proposed a new and innovative strategy: build online banking not as an individual solution, but as a delivery channel that delivers enterprise services, defined as functions that are common across the various channels. The bank's approach for identifying and building the services was also unique: top down from the business as opposed to bottom up from IT. Working with IBM, the business and IT executives analyzed their business needs and mapped their business processes, leveraging the IBM Component Business Model™. They used a service oriented methodology to deconstruct the business processes into components; identified and prioritized the business services that could be reused across the channels; and then tied them to their underlying applications. These business services included profile updates, balance inquiry and balance transfer. This view into the business, coupled with IBM's experience in the financial industry, enabled the bank to build the services using the same business rules and customer data with the appropriate level of specificity for all the delivery channels. Using IBM tools to model the business processes and proposed changes, the bank was able to prioritize the deployment of services based on prioritized business goals.

Meeting aggressive scalability and performance requirements

The new online banking system had aggressive scalability and performance requirements: support four million users, up to 1,000 transactions per second, with a 0.1 second response time per transaction. To ensure these goals could be achieved, the bank leveraged IBM software and hardware to build the core infrastructure and then tested it at the IBM Gaithersburg, Maryland, testing center. Using the bank's own applications, IBM successfully ran the system at 1,000 transactions per second over a lengthy period of time, thereby helping the bank reduce performance risks. Confident from this proof of technology and implementation, the bank began the rollout of the new online banking system in September 2005. Each month since then, a few hundred thousand users have been migrated from the old system to the new one. The rollout will be complete by mid-2006. In the nine months since its implementation, the system has experienced no unscheduled downtime.

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Achieving incremental and sustainable returns for future initiatives

The bank has realized an important business benefit from the initiative—enabling consistent information and a common customer experience across all of the bank's channels. In fact, the bank attributes ongoing high ratings from the American Customer Satisfaction Index to its ability to provide a consistent customer experience. Moreover, significant returns on investment, delivered through greatly decreased development and deployment costs, are being realized as other lines of both the retail and commercial businesses consume the services developed for the online banking initiative. By building a set of repeatable business services that can be used by multiple channels, the bank not only has reduced the need to create and build new services, but can expedite the deployment of new initiatives and speed time to market for new products. Service orientation helps the bank to reduce the cost of each subsequent initiative and gain rapid return on investment.

Adopting service orientation, a large eastern European bank addresses compliance and transforms ATM system for competitive advantage.

Winning the compliance race while gaining significant market leadership

A large eastern European bank, in the process of transforming itself to comply with the rules and regulations of the European Union (EU), achieves compliance in only six months—one-and-a-half years ahead of schedule—thereby saving 18 months of development and deployment costs. Moreover, as part of the compliance initiative, the bank transformed the functions and capabilities of its automated teller machines (ATMs), establishing itself as an industry leader and gaining market share by being one of the only banks in its country to provide interactive customer service directly from its ATMs.

Two challenges, one solution

In eastern Europe, many banks are losing their autonomy and becoming smaller parts of larger group holding companies. One such bank was recently acquired by a larger eastern European based, group-owner bank. The takeover, combined with the country's pending EU membership, presented the bank with two monumental challenges: meet compliance rules and regulations for financial reporting by 2007—as dictated by the EU—and integrate its heterogeneous banking systems with those of the new group holding company.

Meeting EU compliance regulations required the bank to redesign its ATM and credit and debit card systems, moving all the functions and information from a government-held organization to a privately run clearing house. The bank also had to store information according to EU compliance regulations, and the new ATM system had to communicate with a larger network of ATMs and systems.

Gaining business flexibility and protecting existing assets

The bank's executives determined that flexibility was key in designing new systems in order to reuse functions, reduce costs and speed time to market for future business requirements. In addition, new systems had to communicate and comply with the bank's multivendor applications and systems, in order to protect the bank's investments in its existing core banking systems. Bank leaders were quick to adopt service orientation as their strategy, believing it would help them achieve the business agility and flexibility they required. The bank chose to work with IBM because of the IBM team's deep banking industry experience, as well as its ability to reengineer processes and implement solutions.

The bank leveraged the IBM Component Business Model to define the ATM and card management processes and break them down into components. The bank's existing system only supported cash withdrawals at ATMs and included multiple paper and manual based processes between the government-held organization and the bank. The bank defined its priorities and objectives for the new processes; identified common functions that could be defined as services; and mapped those services to underlying applications. Services were built for card, credit and account balance authorization and verification, cash withdrawal, balance checking, account opening and loan applications. The bank utilized IBM software to meet its business and technology requirements—replacing and automating manual processes, reducing error rates and increasing the functionality of the ATMs. The bank executives cited, as an important contributor to their success, that IBM's software portfolio covers the entire life cycle of the transformation—from business process modeling, to identifying services that can fulfill business needs, to tools that automate assembly and implementation and then help manage business prcesses.

Exceeding expectations and saving 18 months of costs

Original projections for reaching EU compliance and timing requirements with the bank's existing systems were two years or more. This project was completed in a mere six months—helping the bank realize savings equivalent to 18 months of application development, deployment and management costs.

Beyond the compliance initiative, the bank enabled the innovation of interactive ATMs—one of the first financial institutions in its country to offer such a leading-edge capability. Now customers can interact directly with the bank from ATMs—giving the firm a major advantage in a fiercely competitive enviroment.

Moving forward, the bank plans to continue working with IBM for its proven software, hardware, services and support of open standards. Over the next three years, it will focus on transforming the remaining bank channels, including branches and call centers. The bank has established itself as a role model within the holding company for its business agility, derived from its service orientation approach.

Make your move

More and more, banks are turning to service orientation to achieve better business flexibility, improved responsiveness and quantifiable returns on investment. And IBM is helping them get there. As these projects have shown, service orientation can help solve immediate business problems while simultaneously laying the groundwork for a flexible business that is capable of adapting to quickly changing market conditions. Although these solutions were implemented by specific banks to address specific business needs, the basic concepts are universal. Concepts such as reusing business functions to reduce costs and speed time to market for new products, creating a single view of the customer, differentiating customer service and protecting investments in core banking systems are relevant to virtually every banking firm. As you think about these projects and the benefits they are delivering, you should think about how your bank can use service orientation to solve similar types of business problems.

To learn more about IBM solutions for banking and how service orientation can help deliver improved business flexibility, please visit:

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